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ATTORNEYS AT LAW

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John C. Kissinger, Jr.
Michael T. McInerny*
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Paul T. Milligan*
Jonathan A. Lax
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Kristin M. Yasenka
David P. Michel
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Of Counsel

*Admitted in MA only

November 23, 2005

RECEIVED
NOV 23 2005
05-22 WC

Michael Sclafani, Wetlands Council Clerk
Department of Environmental Services
6 Hazen Drive
PO Box 95
Concord, NH 03302-0095

Re: Town of Nottingham Selectmen's Notice of Appeal

Dear Mr. Sclafani:

Enclosed for filing with the Water Council, please find an original and twenty (20) copies of the Notice of Appeal.

Thank you for your attention in this matter.

Very truly yours,

COPY

E. Tupper Kinder

ETK/sma
Encls.
cc: Michael Nolin, Department of Environmental Services
Harry Stewart, Department of Environmental Services
Mark E. Beliveau, Esquire
Richard W. Head, Esquire
Armand M. Hyatt, Esquire
Town of Nottingham
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The State of New Hampshire

Department of Environmental Services
Water Council

In Re: Application of USA Springs, Inc. for Approval of Bottled Water Source
Under Env-Ws 389

SELECTMEN OF THE TOWN OF NOTTINGHAM'S NOTICE OF APPEAL

The Town of Nottingham Selectmen, 139 Stage Road, Nottingham, New Hampshire (hereinafter "Nottingham") hereby appeal to the Water Council the Decision of the Department of Environmental Services Water Division (hereinafter "NHDES") to approve new sources of bottled water to USA Springs, Inc. The Department issued its decision October 25, 2005 finding that the criteria specified under Env-Ws 389 have been complied with. (Attachment A). This decision was issued by the Water Division of NHDES under its authority under RSA 485 and specifically in accordance with RSA 485:8 and 48 and Env-Ws 389.

Relief Sought

In the appeal, Nottingham seeks to have the Water Council find and rule that the action of NHDES to approve the new bottled water sources was unlawful and unreasonable and therefore invalid because it failed to comply with the requirements of Env-Ws 389 and related laws and regulations. The appeal is brought pursuant to RSA 485:59, RSA 21-O:7, 14 and Env-Ws 389.

Background Facts

During the NHDES' review of the new bottled water source application, the Town of Nottingham Selectmen ("Nottingham") presented evidence in the form of its opposition to the approval of these sources (see Attachment B – Letter dated August 25, 2005) and including the comments of its expert consultant, Dr. Thomas P. Ballestero (see Attachment C – Letter of Dr. Ballestero dated August 24, 2005). These documents, together with this Notice of Appeal, set

forth a statement of the basis of Nottingham's appeal to the Water Council as required by Env-Wc 203.04.

This appeal has as relevant background the NHDES decision to grant a large groundwater withdrawal permit under RSA 485-C and Env-Ws 388 to USA Springs, Inc. on July 1, 2004. (See Attachment D). This approval was conditional upon the applicant receiving a permit under Env-Ws 389 for a bottled water source and authorized USA Springs, Inc. to withdraw 307,000 gallons per day (113 million gallons per year) from a bedrock aquifer in Nottingham, New Hampshire. Nottingham opposed the application and submitted comprehensive expert testimony from Dr. Ballestero. The pumping test, upon which the applicant relied for its proposal and NHDES relied for its approval, demonstrated "more total impacts and more impacts over a greater distance" than any similar groundwater withdrawal reviewed by NHDES. The withdrawal from these bottled water sources may impact private wells 7000 feet away from the source. Although the large groundwater permit was granted, Nottingham has appealed the large groundwater withdrawal decision to the New Hampshire Supreme Court under the provisions of RSA 541, and that appeal is currently pending. For unknown reasons, a decision to grant a large groundwater withdrawal permit is not appealable to the Water Council and so the permit decision has never been reviewed by this Council in an adjudicative hearing process as will be conducted in this appeal.

Nottingham believes that review of the NHDES decision by the Water Council in an adjudicative hearing process is critical to assuring Nottingham and the citizens of New Hampshire that NHDES will act on new bottled water sources in a manner which is consistent with the laws and regulations, with sound scientific principles and with its obligation to protect

the public groundwater resource, as anticipated by the policy of the State of New Hampshire set forth in RSA 481:1.

RSA 481:1 states as follows:

> "The general court finds that an adequate supply of water is indispensable to the health, welfare and safety of the people of the state and is essential to the balance of the natural environment of the state. Further, the water resources of the state are subject to an ever-increasing demand for new and competing users. The general court declares and determines that the water of New Hampshire whether located above or below ground constitutes a limited and, therefore, precious and invaluable public resource which should be protected, conserved and managed in the interest of present and future generations. The state as trustee of this resource for the public benefit declares that it has the authority and responsibility to provide careful stewardship over all the waters lying within its boundaries. The maximum public benefit shall be sought, including the assurance of health and safety, the enhancement of ecological and aesthetic values, and the overall economic, recreational and social well being of the people of the state .... All levels of government ... shall comply with this policy ...." (emphasis supplied).

Basis for Appeal

By this appeal, Nottingham requests that the Water Council find and rule that the NHDES approval of new bottled water sources was unlawful and unreasonable and therefore and invalid because it failed to require the applicant to comply with the requirements of Env-Ws 389, and the related requirements of Env-Ws 388.

Nottingham asserts the reasons supporting its appeal include, but are not limited to, the following:

A. NHDES based its approval on a pumping test conducted by the applicant which NHDES, itself, acknowledged was improperly conducted under conditions which violated DES requirements and industry practices and produced poor quality data.

B. NHDES did not require the applicant to prove an understanding of the response of the bedrock aquifer to precipitation events and to prove an understanding the origin of the pumped water and its relationship to aquifer recharge and storage. Both of these principles are acknowledged by NHDES to be "fundamental" elements of analysis of a groundwater withdrawal required by the regulations and good scientific practice.

C. NHDES approved the bottled water source despite the above flaws and in the face of data which it acknowledged demonstrated that the withdrawal would partially dewater bedrock and overburden aquifers to an unknown extent. In other words, DES approved use of these sources at the requested production volumes despite the fact that it did not know the nature and extent of adverse impacts which the withdrawal would cause. This action was unlawful and unreasonable. The application should have been denied as required by Env-Ws 389.20

The specific regulations to which NHDES acted in an unlawful and unreasonable manner are as follows:

1. Env-Ws 389.04 requires that the applicant develop a conceptual hydrogeologic model in accordance with Env-Ws 389.07. NHDES approved the sources despite the fact that the conceptual model was based upon poor and inadequate data and a lack of understanding of elements deemed "fundamental" by NHDES, including aquifer flow, boundaries and recharge conditions.

2. Env-Ws 389.04 requires the applicant to delineate the wellhead protection area in accordance with Env-Ws 389.15. NHDES approved the sources despite the fact that this area has never been adequately defined but data has indicated that it may be extensive and that there could be impacts to private wells 7000 feet away from the source and to prime wetlands near the source.

3. Env-Ws 389.04 requires the applicant to comprehensively evaluate the source under the provisions of Env-Ws 389.11, including an evaluation in accordance with the pumping test requirements for large community water systems, and for quality and for natural, high and low flow conditions using "hydrogeologically valid methods." NHDES approved the source even though through only poor and inadequate data was available for review.

4. Env-Ws 389.12 requires the applicant to establish a permitted production volume derived from source evaluation data. NHDES approved a production volume (307,000 gallons

per day) which was not supported by adequate data demonstrating that the production volume was reasonable or sustainable.

5. Env-Ws 389.19 requires the applicant to produce a report to support its application. NHDES accepted the report upon which the applicant relied, a report prepared by Gradient Corporation dated February 2003 and submitted with applicants' large groundwater withdrawal permit application. This report was defective and inadequate for the reasons set forth herein.

Conclusion

For these and other reasons, Nottingham requests the Water Council to find that the NHDES approval of new bottled water sources dated October 25, 2005 was unlawful and unreasonable and is invalid.

A copy of the Notice of Appeal has been forwarded to the Director of the Water Division and to the Commissioner of the Department and to counsel for USA Springs, Inc.

Respectfully submitted,
TOWN OF NOTTINGHAM SELECTMEN

By its attorneys,
Nelson, Kinder, Mosseau & Saturley, P.C.

Dated: November 23, 2005

E. Tupper Kinder, Esquire
99 Middle Street
Manchester, NH 03101
Tel. (603) 647-1800

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, first class, and postage prepaid Michael Nolin, Commissioner, NHDES; Harry Stewart, Director Water Division, NHDES; Mark E. Beliveau, Esquire, Counsel for the Town of Barrington; Armand Hyatt, Counsel for USA Springs, Inc.; and Assistant Attorney General Richard Head.

E. Tupper Kinder, Esquire

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A

The State of New Hampshire
Department of Environmental Services

Michael P. Nolin
Commissioner

October 25, 2005

Mr. Francesco Rotondo
President
USA Springs, Inc.
9 Regis Drive
Pelham, New Hampshire 03078

Subject: New Sources of Bottled Water: Bedrock Sources USA-1, USA-2, and USA-4

Dear Mr. Rotondo:

The purpose of this letter is to conditionally approve (see conditions) wells identified as USA-1, USA-2, and USA-4 as sources of "well water" for bottled water in accordance with Env-Ws 389. The New Hampshire Department of Environmental Services (DES) finds that the following documents demonstrate that the criteria specified by Env-Ws 389.20(a) for approving new sources of bottled water have been complied with:

1) Report titled "Application for Approval of New Groundwater Source of Bottled Water – Proposed USA Springs Bottling Plant" dated June 6, 2005 and documents referenced by this report;

2) Water quality data dated July 27, 2005 from MyKroWaters, Inc.; and

3) Letter dated August 3, 2005 from MyKroWaters, Inc. which provided additional information regarding groundwater sample collection methodology.

Approval for a bottled water product must also be obtained from the Department of Health and Human Services' (DHHS) Beverage and Bottled Water Inspection and Licensing program in accordance with DHHS regulations He-P 2100, Bottled Water. A source classification statement that identifies the wells USA-1, USA-2, and USA-4 as sources of "well water" in accordance with Env-Ws 389.14 will be forwarded by DES to DHHS. All results of the laboratory analyses for water samples collected from USA-1, USA-2, and USA-4 will also be forwarded by DES to the DHHS Beverage & Bottled Water Inspection & Licensing program. You should contact Leah Keller of DHHS at 271-4673 for further information on these approval requirements.

Conditions

1. Prior to initiating bottled water operations, each well must be disinfected and well water samples collected and analyzed for bacteria after appropriate purging of disinfected water. Analyses must demonstrate that total coliform is "absent" from each well prior to use as a bottled water source.

2. Permitted production flow rates and operating parameters for each well are defined in Large Groundwater Withdrawal Permit LGWP-2004-003. The sanitary protective radius for each well shall be established as shown on the plan titled "General Site Plan" as submitted with the June 6, 2005 report.

3. The wellhead protection area shall be established as shown in Figure 3-15 of Gradient's August 12, 2003 submittal and as shown in the June 6, 2005 report on a figure titled "NH Department of Environmental Services Well Siting Inventory for: USA Springs, Inc–145 Old Turnpike Road, Nottingham, New Hampshire".

4. To operate USA-1, USA-2, and USA-4 as sources of bottled water, USA Springs shall comply with the Water Conservation Plan dated August 5, 2005 in accordance with Env-Ws 390. Item 5 of the plan shall be modified to require that all automatic watering devices used for landscape irrigation be equipped with technology that will prevent the systems from starting automatically and that will shut down the systems when not needed, such as in rain storms.

5. USA Springs shall collect separate water samples from USA-1, USA-2, and USA-4 once every 30 days for the first year of operation (after bottled water operations initiate) for volatile organic compounds. The results of these tests must be reported to DES within twenty-one days of collecting the water samples. The water quality data obtained from sampling USA-1, USA-2 and USA-4 must verify that anthropogenic contamination in the groundwater is absent or at concentrations below Ambient Groundwater Quality standards for New Hampshire.

6. Water quality data for samples collected from the wells and submitted to the DES during the new source approval process indicate that several naturally occurring constituents are present in the well water. Treatment or blending may be required to meet the applicable drinking water standards in order to obtain approval from DHHS. If treatment is required for DHHS approval: (a) any discharges of backwash water or other wastewater must comply with the requirements of Env-Ws 1500; (b) any surface water discharges must comply with the federal Clean Water Act requirements; and/or (c) the transportation and disposal of waste solids or liquids derived from the removal of naturally occurring radionuclides must comply with DHHS radiological health regulations and any other applicable federal and state laws governing the handling, transportation and disposal of low-level solid or liquid radioactive material.

Any appeal of this decision must be to the Water Council in conformance with the requirements Env-WC 200. Appeals must be filed within 30 days of the date of this decision. Inquiries regarding appeal procedures should be directed to Mr. Michael Sclafani, DES Council Appeals Clerk, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095; telephone (603) 271-6072.

Please contact me at 271-0660 or bkernen@des.state.nh.us with any questions.

Sincerely,

Brandon Kernen, P.G.
Hydrologist
Water Supply Engineering Bureau

cc: M. Nolin, DES Commissioner
L. Keller, DHHS
Board of Selectmen - Town of Nottingham
Board of Selectmen - Town of Barrington
Board of Selectmen - Town of Northwood
E-mail Project Distribution List

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*Admitted in MA only

August 25, 2005

Brandon Kernen, PG
Hydrologist, Water Supply Engineering Bureau
6 Hazen Drive, PO Box 95
Concord, NH 03302-0095

Re: Town of Nottingham Selectmen's Comments on the USA Springs' Application for New Source of Bottled Water Source under Env-Ws 389

Dear Mr. Kernen:

This letter is submitted on behalf of the Town of Nottingham Selectmen with respect to the above-mentioned application. The Selectmen note that the USA Springs new bottled water source application relies upon the information submitted with its large groundwater withdrawal permit application report dated February 3, 2003, together with the subsequent submissions. As you know, the Selectmen have previously submitted comments indicating their view that the information which USA Springs provided as support for its large groundwater withdrawal permit was inadequate to satisfy the requirements of Env-Ws 388. Many of the requirements of Env-Ws 388 are restated in Env-Ws 389, and the Selectmen reiterate their position that the information is insufficient to form a basis for the issuance of a permit under Env-Ws 389. The Selectmen incorporate by reference their submissions in connection with the large groundwater withdrawal permit dated October 29, 2003, February 5, 2004, April 7, 2004, May 21, 2004, and July 30, 2004. Although the following comments are included in the above-referenced documents, we wish to make specific note of the following points.

Both Env-Ws 388 and 389 contain certain minimum requirements for approval and both regulatory schemes are, or should be, intended to assure that the State's water resources, which are held in trust for the benefit of the public, are properly managed, protected and preserved. Thus, for example, both regulatory schemes require that the applicant develop and refine a conceptual hydrogeologic model of the source water protection area. (See Env-Ws 389.07) and "a source evaluation program." (See Env-Ws 389.11). A wellhead protection area is required to be identified. (Env-Ws 389.08) and refined (Env-Ws 389.15).

The purpose of these regulations is to assure that the applicant has developed a reasonable understanding of aquifer flow, hydraulic boundaries, recharge conditions, and the interaction of the source with surrounding water resources (See Env-Ws 389.07) so that a permitted production volume, which protects the public interest, can be established.

As indicated by previous comments submitted, the Selectmen believe that USA Springs has failed to comply with the requirements of Env-Ws 388 and 389 and that it is unlawful and unreasonable for DES to issue a permit with the requested production volumes under either regulatory scheme. Although the applicant relies on the Gradient Report dated February 2003, in stating that it has satisfied the requirements of providing a refined conceptual hydrogeologic model and a refined wellhead protection area, in fact the Gradient Report fails accomplish these goals. Further, the report is based upon a pumping test performed in November of 2002 and an analysis of conditions at that time. Now, nearly three years later, many new lots (176) with private wells have been established in the Town of Nottingham, and many of these lots may be affected by the USA Springs project. Accordingly, the report does not support the requested production volume and the application should be denied. This position is based on the following undisputed facts:

1. The original pumping test which is relied upon was flawed producing poor quality data.

USA Springs proceeded with a 10-day pump test beginning on November 2, 2002 despite comments from DES suggesting that its testing proposal was inadequate and unwise. DES had recommended a long pumping test (more than 10 days) and suggested that a longer period of pre- and post test monitoring was necessary to obtain reliable data.

USA Springs disregarded these concerns. USA Springs went forward with the test despite the fact that the test was marred by adverse weather conditions. DES characterized the test conditions as "very poor." (DES Decision, December 11, 2003, Appendix 1). It observed,

> "... a report indicates that 1.79 inches of precipitation fell in the 3 days immediately prior to the test .... An additional .55 inches fell during the 10 day test .... The period immediately prior to and during the test were documented by constantly changing and very contrasting weather conditions that included rain, snowfall, warm weather causing significant snow melt and periods of below freezing temperatures causing surface water bodies to freeze. The occurrence of each of these climatic conditions can significantly effect water level measurements as therefore impact the interpretation or analysis completed using this data." (DES Decision, December 11, 2003 at 3).

DES further observed,

> "Many of the responses from shallow overburden and surface monitoring points were dominated by very high precipitation and highly variable climatic conditions.... This means that even when corrections for precipitation are applied, much of the environmental monitoring data collected during the withdrawal testing program will be ambiguous." (DES Decision, August 12, 2003 at 12).

The data which USA Springs chose to rely upon for its permit applications therefore is incomplete, unreliable and ambiguous. Not surprisingly, given the ambiguity of the data upon which the applicant relies, the conceptual hydrogeologic model which it developed was also flawed. The applicant presented two conflicting models choosing to rely on one or the other when it best suited its interests. In one model, the bedrock aquifer was vertically insulated from the overburden aquifer. This allowed it to argue wetlands would not be impacted. In the other model, the bedrock aquifer was considered to be rapidly recharged by precipitation events. This allowed the applicant to argue that recharge was adequate to support its large withdrawal. In fact, there is no reliable data to support either of these models. Because the models are inconsistent, it is clear that neither the applicant nor DES understands the relationship between the bedrock aquifer and precipitation events or surrounding water resources. This is a fundamental requirement of any applicant. In DES' own words,

> "Understanding the response of the bedrock aquifer to precipitation events or to pumping of large withdrawals is essential for assessing for the potential impacts to existing water resources and uses required by Env-Ws 388 as well as the fundamental component of analysis required to determine the source of recharge to pumping for the purpose of delineating a wellhead protection area in accordance with Env-Ws 389.11 and 389.15." (DES Decision, August 12, 2003 at 5).

Neither DES nor the applicant have yet gained this understanding.

As further noted by DES,

> "Understanding the origin derived from the pumped well and its relationship to aquifer recharge storage and ultimately natural discharge is required by Env-Ws 388.06 and 388.14 and is a fundamental element of an analysis to determine if the proposal is sustainable and will result in an adverse impact as defined by Env-Ws 388.18." (DES Decision, August 12, 2003 at 3).

Similarly, neither DES nor the applicant have yet gained this understanding. In short, by DES' own statements of fundamental principles, the information upon which these applications rely fails to satisfy the regulatory requirements.

2. The data from the pumping test showed that the pumping would dewater overburden and bedrock aquifers.

In fact, DES actually concluded that the information produced by USA Springs, unreliable as it was, demonstrated that the proposed withdrawal will partially dewater bedrock and overburden aquifers. DES noted that the USA Springs pumping test did not achieve a state of equilibrium, a condition which DES has stated is essential for any well designed pumping test. (DES Decision, December 11, 2003 at 9). Although DES suggested it believes that the withdrawal proposed by USA Springs will likely reach equilibrium, it conceded that the degree that the withdrawal will affect storage, recharge or discharge at equilibrium will depend upon aquifer properties, boundary conditions and the magnitude of the proposed withdrawal and the nature and extent of recharge. In short, DES does not know the nature and extent of these impacts. It is incumbent on the applicant to demonstrate a sustainable yield and yet it failed to do so. The applicants' report failed to provide a basis for the source and rate of recharge and instead the applicant, and ultimately DES, relied upon generic information which has not been shown to be applicable to the site in question. (DES Decision, July 1, 2004 at 22).

DES conceded it did not have sufficient information to determine the degree of impact which would occur. These uncertainties led USA Springs to propose, and DES to accept, an untested approach to obtaining a permit, one that does not require the applicant to submit reliable technical information proving the sustainability of its proposed production volume. This approach instead allows the applicant to proceed to withdraw a volume, not proven to be sustainable, based upon a condition that would allow DES to order a reduction in pumping levels in the event that a monitoring plan showed that adverse effects were occurring. Although DES accepted this approach, the Nottingham Selectmen have argued that this approach does not constitute a reasonable regulatory approach, does not satisfy the current regulations and does not properly protect the public resource especially where the hydrogeologic regime is not well understood. The combination of DES' failure to require a pumping test which produced reliable data, its failure to require the applicant to provide a reasonable understanding of the hydrogeological regime in question, and its unreasonable reliance on a monitoring plan of a poorly understood system to provide adequate warning of adverse impacts, does not satisfy the responsible stewardship role which is expected of DES by the public generally and the New Hampshire Legislature, specifically.

4. There are remaining questions on the quality of the source.

The Selectmen are concerned that the presence of certain chemicals including radionuclides, identified in the groundwater quality results from the pumping test, have not been adequately discussed by the applicant with respect to compliance with water quality standards. DES noted:

> "In USA Springs case, for example, Radium 226+228 exceeded drinking water standards set forth in Env-Ws 315.60 in the sampling conducted in October 2002, but is well below the standards in samples collected in November 2002." (DES Decision, August 12, 2003 at 6).

DES concluded that it was unclear if groundwater will meet standards without treatment. This calls into question how radionuclides residuals from treatment (if necessary) will be managed. Thus, it is unclear to the selectmen the extent to which the presence of elevated concentrations of certain chemicals in USA Springs' water may require removal of these contaminants, how residuals will be managed, and also the extent to which pumping of the bedrock aquifer may cause the movement of these elevated levels within the aquifer. It is also unclear whether baseline water quality in private wells has been adequately established. This issue has not been adequately addressed in the application.

In conclusion, the Town of Nottingham Selectmen believe that since the application for a new groundwater source of bottled water relies on the fatally flawed pumping test conducted in November 2002 and upon data which fails to present a reasonably reliable hydrogeologic model, the application before DES does not satisfy the requirements for approvals set in Env-Ws 389.04. Specifically, the applicant has not complied with the following requirements:

1. Env-Ws 389.07 – the applicant has failed to develop an accurate conceptual hydrogeologic model of the wellhead protection area.

2. Env-Ws 389.15 – the applicant has failed to accurately define the wellhead protection area.

3. Env-Ws 389.11 – the applicant has failed to accurately evaluate the source including the chemical quality of the source.

4. Env-Ws 389.12 – the applicant has failed to establish a reasonable permitted production volume.

5. Env-Ws 389.19 – the applicant has failed to produce an adequate report.

The applicant has simply failed to prove that the production volume which it seeks is appropriate for the source of the water and the wellhead protection area delineated. Thus, the application should be denied as required by Env-Ws 389.20.

Please feel free to contact me should you have any questions with regard to the above. We have attached hereto some additional comments of Thomas P. Ballestero in support of these comments.

Very truly yours,

E. Tupper Kinder

ETK/sma
Encls.
cc: Michael Nolin, Commissioner
Town of Nottingham Selectmen
Town of Barrington Selectmen
Mark E. Beliveau, Esquire
Richard W. Head, Esquire
Armand Hyatt, Esquire
Tony Soltani, Esquire
Harry Stewart
Anthony Giunta
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24 August 2005

Brandon Kernen, PG
Hydrologist, Water Supply Engineering Bureau
6 Hazen Drive, PO Box 95
Concord, NH 03302-0095

Re: Comments on the USA Springs' Application for New Source of Bottled Water Source under Env-Ws 389

Dear Mr. Kernen:

I am furnishing these comments in reference to the USA Springs Application for New Source of Bottled Water Source at their Nottingham, NH property. My comments are the same as when the application for a large groundwater withdrawal was made for the same project on the property. I realize that NHDES wrote a July 1, 2004 Decisions and Findings with respect to the large groundwater withdrawal application, and some of the comments in the document addressed some of my previous comments. I did respond to the July 1, 2004 NHDES document in my own 28 July 2004 comments. Therefore, in addition to all of my previous comments, I am adding some rebuttal and supporting documentation for my previous conclusions. My previous comments exist in the public record and can be tabulated as:

- Bedrock recharge is not understood,
- The hydraulic influence of pumping was not completely characterized,
- The requested withdrawal amount is unsustainable,
- It was not demonstrated that abutter wells will not be adversely affected,
- It was not demonstrated that wetlands will not be adversely affected,
- There was no attempt to address low flows and instream flows on the Lamprey River and its tributaries, and
- It has not been demonstrated that groundwater contamination can be ignored.

The applicant has continued to rely upon a gross overestimation of bedrock recharge. The following documents clearly demonstrate that New England bedrock exhibits one fourth to as little as one tenth of the recharge assumed (never measured) by the applicant. In addition, the study by Bacca demonstrates that the bedrock groundwater is at least four times older than the overburden groundwater, further attesting to the much lower recharge rate. The applicant could have demonstrated bedrock groundwater recharge by making the effort to take field measurements, but chose not to do so. The applicants' data that does exist does not support the very high recharge rate that they assume.

Tiedeman, C.R., Goode, D.J., and Hsieh, P.A., 1997, Numerical simulation of groundwater flow through glacial deposits and crystalline bedrock in the Mirror Lake area, Grafton County, New Hampshire, U.S. Geological Survey Professional Paper 1572, 50 p.

Mack, Thomas J. and Robert W. Dudley, 2001, Simulated Ground-Water-Flow Responses to Geohydrologic Characteristics, Corinna, Maine, Water-Resources Investigations Report - WRIR 01-4079, Augusta, ME

Bacca Cortes, Gabriel F., 2004, Land Use Influence on the Characteristics of Groundwater Inputs to the Great Bay Estuary, New Hampshire, Master of Science Thesis, University of New Hampshire, Durham, NH.

I reviewed the well sampling data from July, 2005. Wells USA-1, USA-2, and USA-4 were pumped for 24 hours and sampled periodically during this time. The report is difficult to interpret since the well and sample identifications are not identified. The results showed that the sample water had no detections for the chlorinated contaminants previously found after the 2002 pumping test, however, there are now detections of Acetone, MEK, and THF. It seems as though these contaminants are blamed on glue compounds in the temporary piping, but the report certainly does not demonstrate this. More importantly, looking back at the samples and chlorinated contaminants during the 2002 pumping test, the contaminants did not appear until the eighth day of the pumping test (Nov. 27, 2002), they did not appear in the Nov. 19 or Nov. 22 samples. By analogy, this latest round of sampling should have pumped the wells, at the requested flows, for AT LEAST eight days, and sampled periodically through this time. One day of pumping is clearly insufficient to demonstrate that the chlorinated contaminants are not still in the bedrock nor emanating from below the source area.

An additional water quality concern is the environmental isotopes and their activities. There may be an issue with combined Radium 226 and 228, and there is definitely an issue with gross alpha. The applicant has made no attempt to address this issue. However, the pumped water cannot be discharged without a groundwater discharge permit. If the water is to be treated to remove the radioactivity, the discharge of the treatment system residuals also needs to be permitted. The application is silent on this issue, and for this reason alone should be denied.

In conclusion, I find that the applicant has not demonstrated compliance with Env-Ws 389, and as such this application should be denied.

Sincerely,

Thomas P. Ballestero
PhD, PE, PH, CGWP, PG

D

NHDES

Department of Environmental Services

Michael P. Nolin
Commissioner

July 1, 2004

Francesco Rotondo
USA Springs Inc.
9 Regis Drive
Pelham, New Hampshire 03078

Re: USA Springs Large Groundwater Withdrawal Permit – No. LGWP 2004-0003

Dear Mr. Rotondo:

Enclosed is a large groundwater withdrawal permit and associated decision statement in response to your large groundwater withdrawal permit application dated December 29, 2003.

Please note that Condition 10 of the large groundwater withdrawal permit requires that USA Springs obtain new source approval for bottled water from the Department for each well in accordance with New Hampshire Administrative Rule Env-Ws 389. USA Springs will need to supplement its 2003 request for approval of new sources of bottled water with information required by Env-Ws 389.16 and 389.17 to demonstrate that uncontrolled contamination sources do not exist within the wellhead protection area of its withdrawals.

Sincerely,

COPY

Michael P. Nolin
Commissioner

cc: Town of Nottingham
Town of Barrington
Town of Northwood
M. Beliveau, Pierce Atwood
E. Kinder, Nelson, Kinder, Mosseau, & Saturely
R. Head, DOJ
A. Giunta, DES
H. Stewart, DES
B. Kernen, DES

The

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

hereby issues

LARGE GROUNDWATER WITHDRAWAL PERMIT

NO. LGWP-2004-0003

to the permittee

USA SPRINGS, INC
9 REGIS DRIVE
PELHAM, NEW HAMPSHIRE 03078
(603 942 5660)

for the withdrawal of the following volumes of groundwater from the following on-site wells for the purpose of bottling water

Bedrock Well USA-1	106,486 gallons over any 24-hour period
Bedrock Well USA-2	179,874 gallons over any 24-hour period
Bedrock Well USA-4	21,168 gallons over any 24-hour period

located at 145 Old Turnpike Road in Nottingham, New Hampshire (Lot 10, Tax Map 3)

Date of Issuance: July 1, 2004
Date of Expiration: July 1, 2014

Pursuant to authority in N.H. RSA 485-C:21, the New Hampshire Department of Environmental Services (Department), hereby grants this permit to withdraw groundwater from USA –1, USA-2, and USA-4 subject to the following conditions:

1. The permittee shall comply with the requirements of Env-Ws 388 at all times.

2. Pursuant to RSA 485-C:15, the permittee shall allow any authorized member of the Department's staff, or its agent, to enter the property covered by this permit for the purpose of collecting information, examining records, collecting water level measurements, or undertaking other action associated with this permit.

3. Water Conservation: In addition to the measures the permittee proposes in its Permit Application dated February 3, 2003, which is incorporated herein by reference, the following measures shall be implemented:

   a. The permittee shall complete annual pressure testing and leak detection surveys of piping connecting the wells to the bottling plant. All leaks must be repaired within 60 days of discovery. Alternatively, the permittee may utilize meters and totalizers at the wellhead and the bottling plant to determine if water losses exceed 5%. If water losses exceed 5% between the wellhead and the bottling plant, a leak detection and repair program must be implemented. Meters and totalizers must meet the requirements in item 4, below. The permittee must report a summary of activities it undertook to identify and repair pipline leakage in an annual report by January 31 of each year.

   b. The permittee shall maintain shut-off devices in its bottling process that prevents the discharge of unused water to waste.

4. Metering Requirements: Withdrawals from all wells must be metered at all times. The permittee shall provide the Department with a certificate of calibration for each meter, as well as the performance specifications of the meter as prepared by the manufacturer. All meters must be sized and calibrated to monitor the applicable withdrawal and flow rates. The permittee shall also provide the Department with the maintenance and calibration requirements of the meter as prescribed by the manufacturer. The permittee shall maintain and calibrate the meters in accordance with the specifications of the manufacturer. The permittee shall document and maintain records of all meter maintenance and calibration activities and submit this information to the Department in an annual report by January 31 of each year.

5. Monitoring and Requirements

The permittee shall establish and maintain the monitoring and reporting program as described below. The monitoring and reporting program shall be established within the next 60 days and be implemented for at least three months prior to initiating large groundwater withdrawals at the USA Springs site.

   a) Water Level Monitoring: The permittee shall complete the following water level monitoring and reporting program:

i) Off-site Private Wells: Install pressure transducers and data loggers and measure water levels at a frequency of at least every four hours in the following private wells:

Nottingham Private Wells

Lot	Address
3-6	165 Old Turnpike Road
3-2	162 Old Turnpike Road
3-2-1	158 Old Turnpike Road
3-3	166 Old Turnpike Road
3-2A	164 Old Turnpike Road
2-7	181 Old Turnpike Road
2-5	187 Old Turnpike Road
2-8A-4	186 Old Turnpike Road
3-11-15	3 Lincoln Drive
3-11-9	19 Lincoln Drive
3-12-1	86 Freeman Hall Road
14-16	45 Garland Road
14-18	39 Garland Road

Barrington Private Wells

Lot	Address
7-2B-1	4 Wood Road
7-3-8	32 Wood Road

ii) On-site Production Wells: Install pressure transducers and data loggers and measure water levels at a frequency of at least every four hours at USA-1, USA-2 and USA-4.

iii) On-site Monitoring Wells: Install pressure transducers and measure the water levels at a frequency of at least every four hours at the existing and proposed monitoring well locations described in Section 1.2 of Attachment 2 of a letter dated September 11, 2003 incorporated herein by reference from the Gradient Corporation to the Department. The permittee shall install a staff gage, shallow monitoring well, and deep over burden monitoring well at each of the following wetland monitoring sites after obtaining approval from the Department: WM-4, CON1, and CON2. The permittee shall provide the Department with soil boring data and monitoring construction details prior to seeking approval from the Department.

If a private well owner denies permission to monitor water levels, then the permittee shall propose an alternative monitoring location to the Department for

approval. The permittee shall monitor the alternative location upon receiving approval from the Department.

All water level monitoring shall be completed by a person who can demonstrate, by education or experience, competency in collecting and reporting hydrogeologic measurements.

All monitoring data shall be submitted to the Department by the last business day of each calendar month in an electronic format. Water levels shall be reported to the Department as feet relative to the National Geodetic Vertical Datum of 1929. The permittee shall note any relevant observations that may affect water level measurements.

A summary of all monitoring data shall be prepared in a hard copy format and submitted to the Department by January 31 of each year. The annual report shall include all field notes documenting the water level monitoring activities for the preceding year. All field notes shall be signed and dated by the personnel responsible for collecting measurements.

Monitoring well locations and frequencies may be added or changed if the water level data obtained in paragraphs (i)-(iii) above contradict the information obtained in the permittee's application, or if additional data points are required to assess the potential for adverse impacts to occur.

b) Wetlands - Implement the wetland monitoring program summarized in Attachment 2, Section 1.2 of a letter dated September 11, 2003 from the Gradient Corporation to the Department. The wetlands monitoring program shall initiate one year prior to initiating withdrawals and continue indefinitely as a condition of the permit. All work shall be conducted under the direct oversight of a New Hampshire Certified Wetland Scientist. The tri-annual wetland survey must provide a clear determination as to whether or not an adverse impact has occurred, may occur, or has not occurred over the monitoring period. An annual wetland monitoring report must be submitted by January 31 of each year. The results of the tri-annual wetland monitoring and associated impact assessment must be included in the annual wetland monitoring report unless requested sooner by the Department.

c) Stream Gaging: The permittee shall install a weir in the unnamed stream that flows from its site into Round Pond. The weir shall be installed in a stream channel as close as is technically, logistically, and legally possible to Round Pond. The stream flow at the weir shall be monitored weekly starting one year prior to initiating withdrawals, unless snow and ice make measurements not possible. The permittee may propose an alternative method to accurately measure stream flow to the Department. This permit condition shall not be enforced if the permittee can demonstrate that property owners will not grant access to the stream for monitoring.

6. Mitigation Requirements

a) In the event that adverse impacts occur, the permittee shall comply with all of the requirements below and with the impact mitigation and source replacement requirements of Env-Ws 388.

b) Prior to initiating the large groundwater withdrawal, the permittee shall notify any owner of a private well within 7000 feet of USA-1, USA-2, and USA-4. The permittee shall provide copies of the certified returned receipt to the Department. The permittee shall explain to owners of wells in the area that their well may be influenced by the withdrawal at USA Springs. The permittee shall provide the homeowner with contact information for both the permittee and the Department in the event a homeowner believes they may be adversely impacted.

c) The permittee shall notify the Department of any adverse impact within 12-hours of receiving such information. Furthermore, the permittee shall provide potable water for drinking and cooking purposes to a well owner that the Department has determined to be adversely impacted. The permittee shall have 12 hours to provide drinking and cooking water after being notified of an occurrence of an adverse impact. The permittee shall provide potable water for other domestic uses within 36 hours of being notified of an adverse impact (e.g., lower well pump, install higher capacity well pump, drill a new well, or truck bulk water to the property). A permanent alternative water supply that produces water quality that complies with Federal and State drinking water requirements and a quantity of water that complies with the requirements of Env-Ws 388.18, shall be provided to an adversely impacted water users within 30 days of the Department determining that a water user had been adversely impacted.

Contracts with companies capable of providing water and well services (including drilling of new wells) must be developed and maintained prior to and after initiating the withdrawal such that in the event that impacts are noted at private wells, mitigation steps can be undertaken expeditiously. Copies of these contracts shall be provided to the Department prior to initiating the large groundwater withdrawal.

d) Where the status of unanticipated impact is not clear, the permittee shall gather information needed to quantify the impact and determine its status relative to adverse impact criteria defined under Env-Ws 388.18 and provide this information to the Department within 48 hours of being notified by the Department. A verified adverse impact shall be mitigated as described in paragraph (c), above.

e) The Department will routinely review the results of all monitoring data, and if water level monitoring data indicates that groundwater is being extracted at a rate that exceeds natural recharge on average, then the Department will modify the permit in accordance with Env-Ws 388 in order to prevent adverse impacts from occurring. In addition, the permittee shall operate the well in accordance with the management procedures described below:

STAGE I MANAGEMENT PROCEDURES:

In the event that any of the following monitoring triggers are exceeded, output from each production well shall be reduced to 75% of the permitted yield capacity:

Trigger A: A fifteen foot drawdown below the 180-day no-recharge projections (at locations and associated values listed in Table 1), unless it is determined by the Department that the drop in water levels in a specific monitoring point is erroneous based upon an analysis of water levels in all other similar monitoring points.

Trigger B: Moderate Drought Condition as determined by U.S Drought Monitor which is administered by the U.S. Department of Agriculture, Department of Commerce, and National Oceanic and Atmospheric Administration.

Trigger C: An adverse wetland impact determination based upon the criteria of Env-Ws 388.18(c)(7) by the Certified Wetland Scientist completing the monitoring described in Section 4, or the Department.

As part of Stage I management procedures, the permittee shall increase the frequency of reporting of all on-site and off-site water level measurements to the Department, and submit all measurements electronically by the 15th and 30th day of each calendar month.

STAGE II MANAGEMENT PROCEDURES

In the event that any of the conditions listed below are exceeded, then output from each production well shall be reduced to 50% of the permitted yield capacity:

Trigger A: A twenty foot drawdown below the 180-day no-recharge projections (at locations and associated values listed in Table 1), unless it is determined by the Department that the drop in water levels in a specific monitoring point is erroneous based upon an analysis of water levels in all other similar monitoring points.

Trigger B: Severe Drought Condition as determined by U.S. Drought Monitor which is administered by the U.S. Department of Agriculture, Department of Commerce, and National Oceanic and Atmospheric Administration.

Trigger C: An adverse wetland impact determination based upon the criteria of Env-Ws 388.18(c)(7) by the Certified Wetland Scientist completing the monitoring described in Section 4 or the Department that is not corrected by Stage I.

As part of Stage II management procedures, the permittee shall increase the frequency of reporting of all on-site and off-site water level measurements to the Department, and submit all measurements electronically by the 15th and 30th day

of each calendar month.

STAGE III MANAGEMENT PROCEDURES

In the event that any of the following triggers are exceeded based on monitoring at the private wells outlined above, the cumulative withdrawal from all on-site wells shall be reduced to below 57,600 gallons over any 24-hour period.

Trigger A: A thirty foot drawdown below the 180-day no-recharge projections (at locations and associated values listed in Table 1), unless it is determined by the Department that the drop in water levels in a specific monitoring point is erroneous based upon an analysis of water levels in all other similar monitoring points.

Trigger B: Extreme Drought Condition as determined by U.S. Drought Monitor which is administered by the U.S. Department of Agriculture, Department of Commerce, and National Oceanic and Atmospheric Administration.

Trigger C: An adverse wetland impact determination based upon the criteria of Env-Ws 388.18(c)(7) by the Certified Wetland Scientist completing the monitoring described in Section 4 or the Department that is not corrected by Stage II.

As part of Stage III management procedures, the permittee shall increase the frequency of reporting of all on-site and off-site water level measurements to the Department, and submit all measurements electronically by the 15th and 30th day of each calendar month.

STAGE IV MANAGEMENT PROCEDURES

In the event that a monitoring report indicates that the withdrawals are adversely impacting wetlands and the adverse impacts will continue, withdrawals at the site shall cease.

7. Prior to initiating large groundwater withdrawals, the concentration of all contaminants in the overburden and bedrock aquifer associated with historic activities at the Just Cause Site at 155 Old Turnpike Road (DES#200302008) shall be remediated to concentrations below New Hampshire's Ambient Groundwater Quality Standards (AGQS) as set forth in Env-Wm 1403. Withdrawals at the USA Springs site may not be initiated until the Department has issued a "Certificate of No Further Action" for the Just Cause site in accordance with Env-Wm 1403.19.

8. The permittee shall register its new sources of water under the Registered Water User Program and maintain the water use reporting requirements of Env-Wr 700 or its successor rules at all times.

9. The permittee shall apply for renewal of this permit at least 90 days prior to its

expiration date. The permittee shall continue to comply with all conditions in this permit until the permit is renewed or the facility is closed in accordance with all applicable requirements, regardless of whether a renewal application is filed.

10. The permittee shall obtain new source approval for Bottled Water from the Department in accordance with Env-Ws 389 prior to initiating withdrawals at the site for the purpose of bottling water.

The issuance of this permit is based upon the analysis and findings described in the attached document dated July 1, 2004 and titled "Decisions and Findings Regarding USA Springs, Inc., Application for Large Groundwater Withdrawal Permit, December 29, 2003."

Any person aggrieved by any terms or conditions of this permit may appeal in accordance with RSA 541 within 30 days.

Michael P. Nolin, Commissioner
Department of Environmental Services

Table 1: Trigger Water Level Elevations for USA Springs Large Groundwater Withdrawal Permit 2004-003

Town Map/Lot Number	180-Day No-Recharge Drawdown	Stage I Trigger Level	Stage II Trigger Level	Stage III Trigger Level	Address
	(feet-NGVD)	(feet-NGVD)	(feet-NGVD)	(feet-NGVD)	
3-6	344	329	324	314	165 Old Turnpike Road
3-2	363	348	343	333	162 Old Turnpike Road
3-2-1	379	364	359	349	158 Old Turnpike Road
3-3	360	345	340	330	166 Old Turnpike Road
3-2A	365	350	345	335	164 Old Turnpike Road
2-7	341	326	321	311	181 Old Turnpike Road
2-5	357	342	337	327	187 Old Turnpike Road
2-8A-4	381	366	361	351	186 Old Turnpike Road
3-11-15	370	355	350	340	3 Lincoln Drive
3-11-9	371	356	351	341	19 Lincoln Drive
3-12-1	370	355	350	340	86 Freeman Hall Road
14-16 [1]	0 [1]	Note 1	Note 1	Note 1	45 Garland Drive
14-18 [1]	0 [1]	Note 1	Note 1	Note 1	39 Garland Drive
7-2B-1	374	359	354	344	4 Wood Road
7-3-8	303	288	283	273	32 Wood Road

1. Static water levels for these wells shall be determined when monitoring initiates. Stage I, I and III trigger levels shall be adjusted based on the actual static water level in these wells.
2. If an alternative monitoring location is used as described in condition 5a of the permit, then the trigger levels shall be determined as described by footnote 1, above.